

## CHAPTER 3

# USE AND OCCUPANCY CLASSIFICATION (including 2017 errata)

*User note: Code change proposals to sections preceded by the designation [F] will be considered by the International Fire Code Development Committee during the 2016 (Group B) Code Development Cycle. See explanation on page iv.*

### SECTION 301 GENERAL

**301.1 Scope.** The provisions of this chapter shall control the classification of all buildings and structures as to use and occupancy.

### SECTION 302 CLASSIFICATION

**302.1 General.** Structures or portions of structures shall be classified with respect to occupancy in one or more of the groups listed in this section. A room or space that is intended to be occupied at different times for different purposes shall comply with all of the requirements that are applicable to each of the purposes for which the room or space will be occupied. Structures with multiple occupancies or uses shall comply with Section 508. Where a structure is proposed for a purpose that is not specifically provided for in this code, such structure shall be classified in the group that the occupancy most nearly resembles, according to the fire safety and relative hazard involved.

1. Assembly (see Section 303): Groups A-1, A-2, A-3, A-4 and A-5.
2. Business (see Section 304): Group B.
3. Educational (see Section 305): Group E.
4. Factory and Industrial (see Section 306): Groups F-1 and F-2.
5. High Hazard (see Section 307): Groups H-1, H-2, H-3, H-4 and H-5.
6. Institutional (see Section 308): Groups I-1, I-2, I-3 and I-4.
7. Mercantile (see Section 309): Group M.
8. Residential (see Section 310): Groups R-1, R-2, R-3 and R-4.
9. Storage (see Section 311): Groups S-1 and S-2.
10. Utility and Miscellaneous (see Section 312): Group U.

### SECTION 303 ASSEMBLY GROUP A

**303.1 Assembly Group A.** Assembly Group A occupancy includes, among others, the use of a building or structure, or a portion thereof, for the gathering of persons for purposes such as civic, social or religious functions; recreation, food or drink consumption or awaiting transportation.

**303.1.1 Small buildings and tenant spaces.** A building or tenant space used for assembly purposes with an *occupant load* of less than 50 persons shall be classified as a Group B occupancy.

**303.1.2 Small assembly spaces.** The following rooms and spaces shall not be classified as Assembly occupancies:

1. A room or space used for assembly purposes with an *occupant load* of less than 50 persons and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.
2. A room or space used for assembly purposes that is less than 750 square feet (70 m<sup>2</sup>) in area and accessory to another occupancy shall be classified as a Group B occupancy or as part of that occupancy.

**303.1.3 Associated with Group E occupancies.** A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy.

**303.1.4 Accessory to places of religious worship.** Accessory religious educational rooms and religious auditoriums with *occupant loads* of less than 100 per room or space are not considered separate occupancies.

**303.2 Assembly Group A-1.** Group A-1 occupancy includes assembly uses, usually with fixed seating, intended for the production and viewing of the performing arts or motion pictures including, but not limited to:

Motion picture theaters  
Symphony and concert halls  
Television and radio studios admitting an audience  
Theaters

**303.3 Assembly Group A-2.** Group A-2 occupancy includes assembly uses intended for food and/or drink consumption including, but not limited to:

Banquet halls  
Casinos (gaming areas)  
Nightclubs  
Restaurants, cafeterias and similar dining facilities  
(including associated commercial kitchens)  
Taverns and bars

**303.4 Assembly Group A-3.** Group A-3 occupancy includes assembly uses intended for worship, recreation, or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

Amusement arcades  
Art galleries more than 3,000 gross square feet  
Bowling alleys

## USE AND OCCUPANCY CLASSIFICATION

Community halls  
Courtrooms  
Dance halls (not including food or drink consumption)  
Exhibition halls  
Funeral parlors  
Gymnasiums (without spectator seating)  
Indoor *swimming pools* (without spectator seating)  
Indoor tennis courts (without spectator seating)  
Lecture halls  
Libraries  
Museums  
*Places of religious worship*  
Pool and billiard parlors  
Waiting areas in transportation terminals

**303.5 Assembly Group A-4.** Group A-4 occupancy includes assembly uses intended for viewing of indoor sporting events and activities with spectator seating including, but not limited to:

Arenas  
Skating rinks  
*Swimming pools*  
Tennis courts

**303.6 Assembly Group A-5.** Group A-5 occupancy includes assembly uses intended for participation in or viewing outdoor activities including, but not limited to:

Amusement park structures  
*Bleachers*  
*Grandstands*  
Stadiums

### SECTION 304 BUSINESS GROUP B

**304.1 Business Group B.** Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Airport traffic control towers  
*Ambulatory care facilities*  
Animal hospitals, kennels and pounds  
Banks  
Barber and beauty shops  
Car wash  
Civic administration  
*Clinic, outpatient*  
Dry cleaning and laundries: pick-up and delivery stations and self-service  
Educational occupancies for students above the 12th grade  
Electronic data processing  
Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities, and not more than 2,500 square feet (232 m<sup>2</sup>) in area.  
Laboratories: testing and research  
Motor vehicle showrooms  
Post offices

Print shops  
Professional services (architects, attorneys, dentists, physicians, engineers, etc.)  
Radio and television stations  
Telephone exchanges  
Training and skill development not in a school or academic program (this shall include, but not be limited to, tutoring centers, martial arts studios, gymnastics and similar uses regardless of the ages served, and where not classified as a Group A occupancy).

**304.2 Definitions.** The following terms are defined in Chapter 2:

**AMBULATORY CARE FACILITY.**

**CLINIC, OUTPATIENT.**

### SECTION 305 EDUCATIONAL GROUP E

**305.1 Educational Group E.** Educational Group E occupancy includes, among others, the use of a building or structure, or a portion thereof, by six or more persons at any one time for educational purposes through the 12th grade.

**305.1.1 Accessory to places of religious worship.** Religious educational rooms and religious auditoriums, which are accessory to *places of religious worship* in accordance with Section 303.1.4 and have *occupant loads* of less than 100 per room or space, shall be classified as Group A-3 occupancies.

**305.2 Group E, day care facilities.** This group includes buildings and structures or portions thereof occupied by more than five children older than 2 1/2 years of age who receive educational, supervision or *personal care services* for fewer than 24 hours per day.

**305.2.1 Within places of religious worship.** Rooms and spaces within *places of religious worship* providing such day care during religious functions shall be classified as part of the primary occupancy.

**305.2.2 Five or fewer children.** A facility having five or fewer children receiving such day care shall be classified as part of the primary occupancy.

**305.2.3 Five or fewer children in a dwelling unit.** A facility such as the above within a *dwelling unit* and having five or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

**[W] 305.2.4 Family home child care.** *Family home child care* licensed by Washington State for the care of twelve or fewer children shall be classified as Group R-3 or shall comply with the *International Residential Code*.

### SECTION 306 FACTORY GROUP F

**306.1 Factory Industrial Group F.** Factory Industrial Group F occupancy includes, among others, the use of a building or structure, or a portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or

processing operations that are not classified as a Group H hazardous or Group S storage occupancy.

**306.2 Moderate-hazard factory industrial, Group F-1.**

Factory industrial uses that are not classified as Factory Industrial F-2 Low Hazard shall be classified as F-1 Moderate Hazard and shall include, but not be limited to, the following:

- Aircraft (manufacturing, not to include repair)
- Appliances
- Athletic equipment
- Automobiles and other motor vehicles
- Bakeries
- Beverages: over 16-percent alcohol content
- Bicycles
- Boats
- Brooms or brushes
- Business machines
- Cameras and photo equipment
- Canvas or similar fabric
- Carpets and rugs (includes cleaning)
- Clothing
- Construction and agricultural machinery
- Disinfectants
- Dry cleaning and dyeing
- Electric generation plants
- Electronics
- Engines (including rebuilding)
- Food processing establishments and commercial kitchens not associated with restaurants, cafeterias and similar dining facilities, and more than 2,500 square feet (232 m<sup>2</sup>) in area.
- Furniture
- Hemp products
- Jute products
- Laundries
- Leather products
- Machinery
- Marijuana processing
- Metals
- Millwork (sash and door)
- Motion pictures and television filming (without spectators)
- Musical instruments
- Optical goods
- Paper mills or products
- Photographic film
- Plastic products
- Printing or publishing
- Recreational vehicles
- Refuse incineration
- Shoes
- Soaps and detergents
- Textiles
- Tobacco
- Trailers
- Upholstering
- Wood; distillation
- Woodworking (cabinet)

**306.3 Low-hazard factory industrial, Group F-2.** Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials that during finishing, packing or processing do not involve a significant fire hazard shall be classified as F-2 occupancies and shall include, but not be limited to, the following:

- Beverages: up to and including 16-percent alcohol content
- Brick and masonry
- Ceramic products
- Foundries
- Glass products
- Gypsum
- Ice
- Metal products (fabrication and assembly)

**SECTION 307  
HIGH-HAZARD GROUP H**

**[F] 307.1 High-hazard Group H.** High-hazard Group H occupancy includes, among others, the use of a building or structure, or a portion thereof, that involves the manufacturing, processing, generation or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in *control areas* complying with Section 414, based on the maximum allowable quantity limits for *control areas* set forth in Tables 307.1(1) and 307.1(2). Hazardous occupancies are classified in Groups H-1, H-2, H-3, H-4 and H-5 and shall be in accordance with this section, the requirements of Section 415 and the *International Fire Code*. Hazardous materials stored, or used on top of roofs or *canopies*, shall be classified as outdoor storage or use and shall comply with the *International Fire Code*.

**[F] 307.1.1 Uses other than Group H.** An occupancy that stores, uses or handles hazardous materials as described in one or more of the following items shall not be classified as Group H, but shall be classified as the occupancy that it most nearly resembles.

1. Buildings and structures occupied for the application of flammable finishes, provided that such buildings or areas conform to the requirements of Section 416 and the *International Fire Code*.
2. Wholesale and retail sales and storage of flammable and combustible liquids in mercantile occupancies conforming to the *International Fire Code*.
3. Closed piping system containing flammable or combustible liquids or gases utilized for the operation of machinery or equipment.
4. Cleaning establishments that utilize combustible liquid solvents having a flash point of 140°F (60°C) or higher in closed systems employing equipment *listed* by an *approved* testing agency, provided that this occupancy is separated from all other areas of the building by 1-hour *fire barriers* constructed in accordance with Section 707 or 1-hour *horizontal assemblies* constructed in accordance with Section 711, or both.

## USE AND OCCUPANCY CLASSIFICATION

5. Cleaning establishments that utilize a liquid solvent having a flash point at or above 200°F (93°C).
6. Liquor stores and distributors without bulk storage.
7. Refrigeration systems.
8. The storage or utilization of materials for agricultural purposes on the premises.
9. Stationary batteries utilized for facility emergency power, uninterruptable power supply or telecommunication facilities, provided that the batteries are provided with safety venting caps and *ventilation* is provided in accordance with the *International Mechanical Code*.
10. Corrosive personal or household products in their original packaging used in retail display.
11. Commonly used corrosive building materials.
12. Buildings and structures occupied for aerosol storage shall be classified as Group S-1, provided that such buildings conform to the requirements of the *International Fire Code*.
13. Display and storage of nonflammable solid and nonflammable or noncombustible liquid hazardous materials in quantities not exceeding the maximum allowable quantity per *control area* in Group M or S occupancies complying with Section 414.2.5.
14. The storage of black powder, smokeless propellant and small arms primers in Groups M and R-3 and special industrial explosive devices in Groups B, F, M and S, provided such storage conforms to the quantity limits and requirements prescribed in the *International Fire Code*.

**[F] 307.1.2 Hazardous materials.** Hazardous materials in any quantity shall conform to the requirements of this code, including Section 414, and the *International Fire Code*.

TABLE 307.1(1)  
 MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD<sup>a, j, m, n, p</sup>

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE <sup>b</sup>			USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)
Combustible dust	NA	H-2	See Note q	NA	NA	See Note q	NA	NA	See Note q	NA
Combustible fiber <sup>q</sup>	Loose Baled <sup>o</sup>	H-3	(100) (1,000)	NA	NA	(100) (1,000)	NA	NA	(20) (200)	NA
Combustible liquid <sup>c, i</sup>	II IIIA IIIB	H-2 or H-3 H-2 or H-3 NA	NA	120 <sup>d, e</sup> 330 <sup>d, e</sup> 13,200 <sup>e, f</sup>	NA	NA	120 <sup>d</sup> 330 <sup>d</sup> 13,200 <sup>f</sup>	NA	NA	30 <sup>d</sup> 80 <sup>d</sup> 3,300 <sup>f</sup>
Consumer fireworks	1.4G	H-3	125 <sup>e, l</sup>	NA	NA	NA	NA	NA	NA	NA
Cryogenic flammable	NA	H-2	NA	45 <sup>d</sup>	NA	NA	45 <sup>d</sup>	NA	NA	10 <sup>d</sup>
Cryogenic inert	NA	NA	NA	NA	NL	NA	NA	NL	NA	NA
Cryogenic oxidizing	NA	H-3	NA	45 <sup>d</sup>	NA	NA	45 <sup>d</sup>	NA	NA	10 <sup>d</sup>
Explosives	Division 1.1	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	Division 1.2	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	Division 1.3	H-1 or H-2	5 <sup>e, g</sup>	(5) <sup>e, g</sup>		1 <sup>g</sup>	(1) <sup>g</sup>		1 <sup>g</sup>	(1) <sup>g</sup>
	Division 1.4	H-3	50 <sup>e, g</sup>	(50) <sup>e, g</sup>		50 <sup>g</sup>	(50) <sup>g</sup>		NA	NA
	Division 1.4G	H-3	125 <sup>d, e, l</sup>	NA		NA	NA		NA	NA
	Division 1.5	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>		0.25 <sup>g</sup>	(0.25) <sup>g</sup>
Division 1.6	H-1	1 <sup>e, g</sup>	NA	NA	NA	NA	NA			
Flammable gas	Gaseous Liquefied	H-2	NA	NA (150) <sup>d, e</sup>	1,000 <sup>d, e</sup> NA	NA	NA (150) <sup>d, e</sup>	1,000 <sup>d, e</sup> NA	NA	NA
Flammable liquid <sup>c</sup>	IA IB and IC	H-2 or H-3	NA	30 <sup>d, e</sup> 120 <sup>d, e</sup>	NA	NA	30 <sup>d</sup> 120 <sup>d</sup>	NA	NA	10 <sup>d</sup> 30 <sup>d</sup>
Flammable liquid, combination (IA, IB, IC)	NA	H-2 or H-3	NA	120 <sup>d, e, h</sup>	NA	NA	120 <sup>d, h</sup>	NA	NA	30 <sup>d, h</sup>
Flammable solid	NA	H-3	125 <sup>d, e</sup>	NA	NA	125 <sup>d</sup>	NA	NA	25 <sup>d</sup>	NA
Inert gas	Gaseous	NA	NA	NA	NL	NA	NA	NL	NA	NA
	Liquefied	NA	NA	NA	NL	NA	NA	NL	NA	NA
Organic peroxide	UD	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	I	H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>		1 <sup>d</sup>	(1) <sup>d</sup>		1 <sup>d</sup>	(1) <sup>d</sup>
	II	H-3	50 <sup>d, e</sup>	(50) <sup>d, e</sup>		50 <sup>d</sup>	(50) <sup>d</sup>		10 <sup>d</sup>	(10) <sup>d</sup>
	III	H-3	125 <sup>d, e</sup>	(125) <sup>d, e</sup>		125 <sup>d</sup>	(125) <sup>d</sup>		25 <sup>d</sup>	(25) <sup>d</sup>
	IV	NA	NL	NL		NL	NL		NL	NL
	V	NA	NL	NL		NL	NL		NL	NL
Oxidizer	4	H-1	1 <sup>g</sup>	(1) <sup>e, g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	NA	0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	3 <sup>k</sup>	H-2 or H-3	10 <sup>d, e</sup>	(10) <sup>d, e</sup>		2 <sup>d</sup>	(2) <sup>d</sup>		2 <sup>d</sup>	(2) <sup>d</sup>
	2	H-3	250 <sup>d, e</sup>	(250) <sup>d, e</sup>		250 <sup>d</sup>	(250) <sup>d</sup>		50 <sup>d</sup>	(50) <sup>d</sup>
	1	NA	4,000 <sup>e, f</sup>	(4,000) <sup>e, f</sup>		4,000 <sup>f</sup>	(4,000) <sup>f</sup>		1,000 <sup>f</sup>	(1,000) <sup>f</sup>
Oxidizing gas	Gaseous Liquefied	H-3	NA	NA (150) <sup>d, e</sup>	1,500 <sup>d, e</sup> NA	NA	NA (150) <sup>d, e</sup>	1,500 <sup>d, e</sup> NA	NA	NA
Pyrophoric	NA	H-2	4 <sup>e, g</sup>	(4) <sup>e, g</sup>	50 <sup>e, g</sup>	1 <sup>g</sup>	(1) <sup>g</sup>	10 <sup>e, g</sup>	0	0
Unstable (reactive)	4	H-1	1 <sup>e, g</sup>	(1) <sup>e, g</sup>	10 <sup>e, g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>	2 <sup>e, g</sup>	0.25 <sup>g</sup>	(0.25) <sup>g</sup>
	3	H-1 or H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>	50 <sup>d, e</sup>	1 <sup>d</sup>	(1) <sup>d</sup>	10 <sup>d, e</sup>	1 <sup>d</sup>	(1) <sup>d</sup>
	2	H-3	50 <sup>d, e</sup>	(50) <sup>d, e</sup>	750 <sup>d, e</sup>	50 <sup>d</sup>	(50) <sup>d</sup>	750 <sup>d, e</sup>	10 <sup>d</sup>	(10) <sup>d</sup>
	1	NA	NL	NL	NL	NL	NL	NL	NL	NL
Water reactive	3	H-2	5 <sup>d, e</sup>	(5) <sup>d, e</sup>	NA	5 <sup>d</sup>	(5) <sup>d</sup>	NA	1 <sup>d</sup>	(1) <sup>d</sup>
	2	H-3	50 <sup>d, e</sup>	(50) <sup>d, e</sup>		50 <sup>d</sup>	(50) <sup>d</sup>		10 <sup>d</sup>	(10) <sup>d</sup>
	1	NA	NL	NL		NL	NL		NL	NL

For SI: 1 cubic foot = 0.028 m<sup>3</sup>, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

NL = Not Limited; NA = Not Applicable; UD = Unclassified Detonable.

- a. For use of control areas, see Section 414.2.
- b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
- c. The quantities of alcoholic beverages in retail and wholesale sales occupancies shall not be limited provided the liquids are packaged in individual containers not exceeding 1.3 gallons. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs or consumer products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids with the remainder of the solutions not being flammable, shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
- d. Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.
- e. Maximum allowable quantities shall be increased 100 percent when stored in *approved* storage cabinets, day boxes, gas cabinets, gas rooms or exhausted enclosures or in *listed* safety cans in accordance with Section 5003.9.10 of the *International Fire Code*. Where Note d also applies, the increase for both notes shall be applied accumulatively.
- f. Quantities shall not be limited in a building equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- g. Allowed only in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.
- h. Containing not more than the maximum allowable quantity per *control area* of Class IA, IB or IC flammable liquids.
- i. The maximum allowable quantity shall not apply to fuel oil storage complying with Section 603.3.2 of the *International Fire Code*.
- j. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.
- k. A maximum quantity of 200 pounds of solid or 20 gallons of liquid Class 3 oxidizers is allowed when such materials are necessary for maintenance purposes, operation or sanitation of equipment when the storage containers and the manner of storage are *approved*.
- l. Net weight of the pyrotechnic composition of the fireworks. Where the net weight of the pyrotechnic composition of the fireworks is not known, 25 percent of the gross weight of the fireworks, including packaging, shall be used.
- m. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2 of the *International Fire Code*.
- n. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 414.2.5, see Tables 414.2.5(1) and 414.2.5(2).
- o. Densely packed baled cotton that complies with the packing requirements of ISO 8115 shall not be included in this material class.
- p. The following shall not be included in determining the maximum allowable quantities:
  - 1. Liquid or gaseous fuel in fuel tanks on vehicles.
  - 2. Liquid or gaseous fuel in fuel tanks on motorized equipment operated in accordance with the *International Fire Code*.
  - 3. Gaseous fuels in piping systems and fixed appliances regulated by the *International Fuel Gas Code*.
  - 4. Liquid fuels in piping systems and fixed appliances regulated by the *International Mechanical Code*.
  - 5. Alcohol-based hand rubs classified as Class I or II liquids in dispensers that are installed in accordance with Sections 5705.5 and 5705.5.1 of the *International Fire Code*. The location of the alcohol-based hand rub (ABHR) dispensers shall be provided in the *construction documents*.
- q. Where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.

[F] TABLE 307.1(2)

MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIAL POSING A HEALTH HAZARD<sup>a, c, f, h, i</sup>

MATERIAL	STORAGE <sup>b</sup>			USE-CLOSED SYSTEMS <sup>b</sup>			USE-OPEN SYSTEMS <sup>b</sup>	
	Solid pounds <sup>d, e</sup>	Liquid gallons (pounds) <sup>d, e</sup>	Gas cubic feet at NTP (pounds) <sup>d</sup>	Solid pounds <sup>d</sup>	Liquid gallons (pounds) <sup>d</sup>	Gas cubic feet at NTP (pounds) <sup>d</sup>	Solid pounds <sup>d</sup>	Liquid gallons (pounds) <sup>d</sup>
Corrosives	5,000	500	Gaseous 810 <sup>e</sup> Liquefied (150)	5,000	500	Gaseous 810 <sup>e</sup> Liquefied (150)	1,000	100
Highly Toxic	10	(10)	Gaseous 20 <sup>g</sup> Liquefied (4) <sup>g</sup>	10	(10)	Gaseous 20 <sup>g</sup> Liquefied (4) <sup>g</sup>	3	(3)
Toxic	500	(500)	Gaseous 810 <sup>e</sup> Liquefied (150) <sup>e</sup>	500	(500)	Gaseous 810 <sup>e</sup> Liquefied (150) <sup>e</sup>	125	(125)

For SI: 1 cubic foot = 0.028 m<sup>3</sup>, 1 pound = 0.454 kg, 1 gallon = 3.785 L.

- a. For use of control areas, see Section 414.2.
- b. The aggregate quantity in use and storage shall not exceed the quantity listed for storage.
- c. In retail and wholesale sales occupancies, the quantities of medicines, foodstuffs or consumer products, and cosmetics containing not more than 50 percent by volume of water-miscible liquids and with the remainder of the solutions not being flammable, shall not be limited, provided that such materials are packaged in individual containers not exceeding 1.3 gallons.
- d. Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1. Where Note e also applies, the increase for both notes shall be applied accumulatively.
- e. Maximum allowable quantities shall be increased 100 percent where stored in *approved* storage cabinets, gas cabinets or exhausted enclosures as specified in the *International Fire Code*. Where Note d also applies, the increase for both notes shall be applied accumulatively.
- f. For storage and display quantities in Group M and storage quantities in Group S occupancies complying with Section 414.2.5, see Tables 414.2.5(1) and 414.2.5(2).
- g. Allowed only where stored in *approved* exhausted gas cabinets or exhausted enclosures as specified in the *International Fire Code*.
- h. Quantities in parenthesis indicate quantity units in parenthesis at the head of each column.
- i. For gallons of liquids, divide the amount in pounds by 10 in accordance with Section 5003.1.2 of the *International Fire Code*.

**USE AND OCCUPANCY CLASSIFICATION**

[F] 307.2 Definitions. The following terms are defined in Chapter 2:

**AEROSOL**

Level 1 aerosol products.

Level 2 aerosol products.

Level 3 aerosol products.

**AEROSOL CONTAINER.**

**BALED COTTON.**

**BALED COTTON, DENSELY PACKED.**

**BARRICADE.**

Artificial barricade.

Natural barricade.

**BOILING POINT.**

**CLOSED SYSTEM.**

**COMBUSTIBLE DUST.**

**COMBUSTIBLE FIBERS.**

**COMBUSTIBLE LIQUID.**

Class II.

Class IIIA.

Class IIIB.

**COMPRESSED GAS.**

**CONTROL AREA.**

**CORROSIVE.**

**CRYOGENIC FLUID.**

**DAY BOX.**

**DEFLAGRATION.**

**DETONATION.**

**DISPENSING.**

**EXPLOSION.**

**EXPLOSIVE.**

High explosive.

Low explosive.

Mass-detonating explosives.

UN/DOtn Class 1 explosives.

Division 1.1.

Division 1.2.

Division 1.3.

Division 1.4.

Division 1.5.

Division 1.6.

**FIREWORKS.**

Fireworks, 1.3G.

Fireworks, 1.4G.

**FLAMMABLE GAS.**

**FLAMMABLE LIQUEFIED GAS.**

**FLAMMABLE LIQUID.**

Class IA.

Class IB.

Class IC.

**FLAMMABLE MATERIAL.**

**FLAMMABLE SOLID.**

**FLASH POINT.**

**HANDLING.**

**HAZARDOUS MATERIALS.**

**HEALTH HAZARD.**

**HIGHLY TOXIC.**

**INCOMPATIBLE MATERIALS.**

**INERT GAS.**

**OPEN SYSTEM.**

**OPERATING BUILDING.**

**ORGANIC PEROXIDE.**

Class I.

Class II.

Class III.

Class IV.

Class V.

Unclassified detonable.

**OXIDIZER.**

Class 4.

Class 3.

Class 2.

Class 1.

**OXIDIZING GAS.**

**PHYSICAL HAZARD.**

**PYROPHORIC.**

**PYROTECHNIC COMPOSITION.**

**TOXIC.**

**UNSTABLE (REACTIVE) MATERIAL.**

Class 4.

Class 3.

Class 2.

Class 1.

**WATER-REACTIVE MATERIAL.**

Class 3.

Class 2.

Class 1.

[F] 307.3 High-hazard Group H-1. Buildings and structures containing materials that pose a detonation hazard shall be classified as Group H-1. Such materials shall include, but not be limited to, the following:

Detonable pyrophoric materials

Explosives:

- Division 1.1
- Division 1.2
- Division 1.3
- Division 1.4
- Division 1.5
- Division 1.6

Organic peroxides, unclassified detonable

Oxidizers, Class 4

Unstable (reactive) materials, Class 3 detonable and Class 4

**[F] 307.3.1 Occupancies containing explosives not classified as H-1.** The following occupancies containing explosive materials shall be classified as follows:

1. Division 1.3 explosive materials that are used and maintained in a form where either confinement or configuration will not elevate the hazard from a mass fire to mass explosion hazard shall be allowed in H-2 occupancies.
2. Articles, including articles packaged for shipment, that are not regulated as a Division 1.4 explosive under Bureau of Alcohol, Tobacco, Firearms and Explosives regulations, or unpackaged articles used in process operations that do not propagate a detonation or deflagration between articles shall be allowed in H-3 occupancies.

**[F] 307.4 High-hazard Group H-2.** Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning shall be classified as Group H-2. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103.4 kPa).

Combustible dusts where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.

Cryogenic fluids, flammable.

Flammable gases.

Organic peroxides, Class I.

Oxidizers, Class 3, that are used or stored in normally open containers or systems, or in closed containers or systems pressurized at more than 15 pounds per square inch gauge (103 kPa).

Pyrophoric liquids, solids and gases, nondetonable.

Unstable (reactive) materials, Class 3, nondetonable.

Water-reactive materials, Class 3.

**[F] 307.5 High-hazard Group H-3.** Buildings and structures containing materials that readily support combustion or that pose a physical hazard shall be classified as Group H-3. Such materials shall include, but not be limited to, the following:

Class I, II or IIIA flammable or combustible liquids that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103.4 kPa) or less.

Combustible fibers, other than densely packed baled cotton, where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3.

Consumer fireworks, 1.4G (Class C, Common)

Cryogenic fluids, oxidizing

Flammable solids

Organic peroxides, Class II and III

Oxidizers, Class 2

Oxidizers, Class 3, that are used or stored in normally closed containers or systems pressurized at 15 pounds per square inch gauge (103 kPa) or less

Oxidizing gases

Unstable (reactive) materials, Class 2

Water-reactive materials, Class 2

**[F] 307.6 High-hazard Group H-4.** Buildings and structures containing materials that are health hazards shall be classified as Group H-4. Such materials shall include, but not be limited to, the following:

Corrosives

Highly toxic materials

Toxic materials

**[F] 307.7 High-hazard Group H-5.** Semiconductor fabrication facilities and comparable research and development areas in which hazardous production materials (HPM) are used and the aggregate quantity of materials is in excess of those listed in Tables 307.1(1) and 307.1(2) shall be classified as Group H-5. Such facilities and areas shall be designed and constructed in accordance with Section 415.11.

**[F] 307.8 Multiple hazards.** Buildings and structures containing a material or materials representing hazards that are classified in one or more of Groups H-1, H-2, H-3 and H-4 shall conform to the code requirements for each of the occupancies so classified.

## SECTION 308 INSTITUTIONAL GROUP I

**308.1 Institutional Group I.** Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which care or supervision is provided to persons who are or are not capable of self-preservation without physical assistance or in which persons are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

**308.2 Definitions.** The following terms are defined in Chapter 2:

**24-HOUR BASIS.**

**CUSTODIAL CARE.**

**DETOXIFICATION FACILITIES.**

**FOSTER CARE FACILITIES.**

**[W] HOSPICE CARE CENTER.**  
**HOSPITALS AND PSYCHIATRIC HOSPITALS.**  
**INCAPABLE OF SELF-PRESERVATION.**  
**MEDICAL CARE.**  
**NURSING HOMES.**

**308.3 Institutional Group I-1.** Institutional Group I-1 occupancy shall include buildings, structures or portions thereof for more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised environment and receive custodial care. Buildings of Group I-1 shall be classified as one of the occupancy conditions specified in Section 308.3.1 or 308.3.2. This group shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Group homes
- Halfway houses
- Residential board and care facilities
- Social rehabilitation facilities

**308.3.1 Condition 1.** This occupancy condition shall include buildings in which all persons receiving custodial care who, without any assistance, are capable of responding to an emergency situation to complete building evacuation.

**308.3.2 Condition 2.** This occupancy condition shall include buildings in which there are any persons receiving custodial care who require limited verbal or physical assistance while responding to an emergency situation to complete building evacuation.

**[W] 308.3.3 Licensed care facilities.** *Assisted living facilities licensed by Washington State under Chapter 388-78A WAC and residential treatment facilities licensed by Washington State under Chapter 246-337 WAC shall be classified as Group R-2.*

~~(308.3.3 Six to sixteen persons receiving custodial care. A facility housing not fewer than six and not more than 16 persons receiving custodial care shall be classified as Group R-4.)~~

**308.3.4 Five or fewer persons receiving custodial care.** A facility with five or fewer persons receiving custodial care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

**[W] 308.3.5 Adult family homes.** *Adult family homes licensed by Washington state shall be classified as Group R-3 or shall comply with the International Residential Code.*

**308.4 Institutional Group I-2.** Institutional Group I-2 occupancy shall include buildings and structures used for *medical care* on a 24-hour basis for more than five persons who are *incapable of self-preservation*. This group shall include, but not be limited to, the following:

- Foster care facilities*
- Detoxification facilities*
- Hospice care centers*
- Hospitals*
- Nursing homes*
- Psychiatric hospitals*

**308.4.1 Occupancy conditions.** Buildings of Group I-2 shall be classified as one of the occupancy conditions specified in Section 308.4.1.1 or 308.4.1.2.

**308.4.1.1 Condition 1.** This occupancy condition shall include facilities that provide nursing and medical care but do not provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to nursing homes and foster care facilities.

**308.4.1.2 Condition 2.** This occupancy condition shall include facilities that provide nursing and medical care and could provide emergency care, surgery, obstetrics or in-patient stabilization units for psychiatric or detoxification, including but not limited to hospitals.

**308.4.2 Five or fewer persons receiving medical care.** A facility with five or fewer persons receiving medical care shall be classified as Group R-3 or shall comply with the *International Residential Code* provided an *automatic sprinkler system* is installed in accordance with Section 903.3.1.3 or Section P2904 of the *International Residential Code*.

**[W] 308.4.3 Licensed care facilities.** *Assisted living facilities licensed by Washington state under chapter 388-78A WAC and residential treatment facilities licensed by Washington state under chapter 246-337 WAC shall be classified as Group R-2.*

**308.5 Institutional Group I-3.** Institutional Group I-3 occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. A Group I-3 facility is occupied by persons who are generally *incapable of self-preservation* due to security measures not under the occupants' control. This group shall include, but not be limited to, the following:

- Correctional centers
- Detention centers
- Jails
- Prerelease centers
- Prisons
- Reformatories

Buildings of Group I-3 shall be classified as one of the occupancy conditions specified in Sections 308.5.1 through 308.5.5 (see Section 408.1).

**308.5.1 Condition 1.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via *means of egress* without restraint. A Condition 1 facility is permitted to be constructed as Group R.

**308.5.2 Condition 2.** This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied *smoke compartment*

to one or more other *smoke compartments*. Egress to the exterior is impeded by locked *exits*.

**308.5.3 Condition 3.** This occupancy condition shall include buildings in which free movement is allowed within individual *smoke compartments*, such as within a residential unit comprised of individual *sleeping units* and group activity spaces, where egress is impeded by remote-controlled release of *means of egress* from such a *smoke compartment* to another *smoke compartment*.

**308.5.4 Condition 4.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from *sleeping units*, activity spaces and other occupied areas within the *smoke compartment* to other *smoke compartments*.

**308.5.5 Condition 5.** This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from *sleeping units*, activity spaces and other occupied areas within the *smoke compartment* to other *smoke compartments*.

**308.6 Institutional Group I-4, day care facilities.** Institutional Group I-4 occupancy shall include *buildings* and structures occupied by more than five persons of any age who receive *custodial care* for fewer than 24 hours per day by persons other than parents or guardians, relatives by blood, marriage or adoption, and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

Adult day care  
Child day care

**308.6.1 Classification as Group E.** A child day care facility that provides care for more than five but not more than 100 children 2 1/2 years or less of age, where the rooms in which the children are cared for are located on a *level of exit discharge* serving such rooms and each of these *child care* rooms has an *exit* door directly to the exterior, shall be classified as Group E.

**308.6.2 Within a place of religious worship.** Rooms and spaces within *places of religious worship* providing such care during religious functions shall be classified as part of the primary occupancy.

**308.6.3 Five or fewer persons receiving care.** A facility having five or fewer persons receiving *custodial care* shall be classified as part of the primary occupancy.

**308.6.4 Five or fewer persons receiving care in a dwelling unit.** A facility such as the above within a *dwelling unit* and having five or fewer persons receiving *custodial care* shall be classified as a Group R-3 occupancy or shall comply with the *International Residential Code*.

**[W] 308.6.5 Family home child care.** *Family home child care* licensed by Washington state for the care of 12 or fewer children shall be classified as Group R-3 or shall comply with the *International Residential Code*.

## SECTION 309 MERCANTILE GROUP M

**309.1 Mercantile Group M.** Mercantile Group M occupancy includes, among others, the use of a building or structure or a portion thereof for the display and sale of merchandise, and involves stocks of goods, wares or merchandise incidental to such purposes and accessible to the public. Mercantile occupancies shall include, but not be limited to, the following:

Art galleries, 3,000 gross square feet or less  
Department stores  
Drug stores  
Markets  
Motor fuel-dispensing facilities  
Retail or wholesale stores  
Sales rooms

**309.2 Quantity of hazardous materials.** The aggregate quantity of nonflammable solid and nonflammable or non-combustible liquid hazardous materials stored or displayed in a single *control area* of a Group M occupancy shall not exceed the quantities in Table 414.2.5(1).

## SECTION 310 RESIDENTIAL GROUP R

**310.1 Residential Group R.** Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code*.

**[W] 310.2 Definitions.** The following terms are defined in Chapter 2:

**ADULT FAMILY HOME.**  
**BOARDING HOUSE.**  
**CHILD CARE.**  
**CHILD CARE, FAMILY HOME.**  
**CONGREGATE LIVING FACILITIES.**  
**DORMITORY.**  
**GROUP HOME.**  
**GUEST ROOM.**  
**LODGING HOUSE.**  
**PERSONAL CARE SERVICE.**  
**TRANSIENT.**

**310.3 Residential Group R-1.** Residential Group R-1 occupancies containing *sleeping units* where the occupants are primarily *transient* in nature, including:

*Boarding houses (transient)* with more than 10 occupants  
*Congregate living facilities (transient)* with more than 10 occupants  
*Hotels (transient)*  
*Motels (transient)*

**[W] 310.4 Residential Group R-2.** Residential Group R-2 occupancies containing *sleeping units* or more than two *dwelling units* where the occupants are primarily permanent in nature, including:

Apartment houses  
Assisted living facilities licensed by Washington state  
under Chapter 388-78A WAC  
 Boarding houses (nontransient) with more than 16  
 occupants  
 Congregate living facilities (nontransient) with more  
 than 16 occupants  
 Convents  
 Dormitories  
 Fraternities and sororities  
 Hotels (nontransient)  
Buildings that contain three or more ((E))live/work units  
 Monasteries  
 Motels (nontransient)  
Residential treatment facilities licensed by Washington  
state under Chapter 246-337 WAC  
 Vacation timeshare properties

**310.5 Residential Group R-3.** Residential Group R-3 occu-  
 panancies where the occupants are primarily permanent in  
 nature and not classified as Group R-1, R-2, ((R-4)) or I,  
 including:

Buildings that do not contain more than two *dwelling units*  
 Boarding houses (nontransient) with 16 or fewer occupants  
 Boarding houses (transient) with 10 or fewer occupants  
 Care facilities that provide accommodations for five or  
 fewer persons receiving care  
 Congregate living facilities (nontransient) with 16 or  
 fewer occupants  
 Congregate living facilities (transient) with 10 or fewer  
 occupants  
Buildings that do not contain more than two live/work  
units  
 Lodging houses with five or fewer *guest rooms*

**310.5.1 Care facilities within a dwelling.** Care facilities  
 for five or fewer persons receiving care that are within a  
 single-family dwelling are permitted to comply with the  
*International Residential Code* provided an *automatic*  
*sprinkler system* is installed in accordance with Section  
 903.3.1.3 or Section P2904 of the *International Residen-*  
*tial Code*.

**310.5.2 Lodging houses.** Owner-occupied *lodging houses*  
 with five or fewer *guest rooms* shall be permitted to be  
 constructed in accordance with the *International Residen-*  
*tial Code*.

**[W] 310.5.3 Adult family homes, family home child**  
**care.** Adult family homes and family home child care fac-  
ilities that are within a single-family home are permitted to  
comply with the International Residential Code.

**[W] 310.5.4 Foster family care homes.** Foster family  
 care homes licensed by Washington state are permitted to  
 comply with the *International Residential Code*, as an  
 accessory use to a *dwelling*, for six or fewer children  
 including those of the resident family.

~~(310.6 Residential Group R-4. Residential Group R-4~~  
~~occupancy shall include buildings, structures or portions~~  
~~thereof for more than five but not more than 16 persons,~~  
~~excluding staff, who reside on a 24-hour basis in a supervised~~  
~~residential environment and receive custodial care. Buildings~~

of Group R-4 shall be classified as one of the occupancy con-  
 ditions specified in Section 310.6.1 or 310.6.2. This group  
 shall include, but not be limited to, the following:

- Alcohol and drug centers
- Assisted living facilities
- Congregate care facilities
- Group homes
- Halfway houses
- Residential board and care facilities
- Social rehabilitation facilities

~~Group R-4 occupancies shall meet the requirements for~~  
~~construction as defined for Group R-3, except as otherwise~~  
~~provided for in this code.~~

~~310.6.1 Condition 1. This occupancy condition shall~~  
~~include buildings in which all persons receiving custodial~~  
~~care, without any assistance, are capable of responding to~~  
~~an emergency situation to complete building evacuation.~~

~~310.6.2 Condition 2. This occupancy condition shall~~  
~~include buildings in which there are any persons receiving~~  
~~custodial care who require limited verbal or physical assis-~~  
~~tance while responding to an emergency situation to com-~~  
~~plete building evacuation.)~~

## SECTION 311 STORAGE GROUP S

**311.1 Storage Group S.** Storage Group S occupancy  
 includes, among others, the use of a building or structure, or a  
 portion thereof, for storage that is not classified as a hazard-  
 ous occupancy.

**311.1.1 Accessory storage spaces.** A room or space used  
 for storage purposes that is less than 100 square feet (9.3  
 m<sup>2</sup>) in area and accessory to another occupancy shall be  
 classified as part of that occupancy. The aggregate area of  
 such rooms or spaces shall not exceed the allowable area  
 limits of Section 508.2.

**311.2 Moderate-hazard storage, Group S-1.** Storage Group  
 S-1 occupancies are *buildings* occupied for storage uses that  
 are not classified as Group S-2, including, but not limited to,  
 storage of the following:

- Aerosols, Levels 2 and 3
- Aircraft hangar (storage and repair)
- Bags: cloth, burlap and paper
- Bamboos and rattan
- Baskets
- Belting: canvas and leather
- Books and paper in rolls or packs
- Boots and shoes
- Buttons, including cloth covered, pearl or bone
- Cardboard and cardboard boxes
- Clothing, woolen wearing apparel
- Cordage
- Dry boat storage (indoor)
- Furniture
- Furs
- Glues, mucilage, pastes and size
- Grains

Horns and combs, other than celluloid  
 Leather  
 Linoleum  
 Lumber  
 Motor vehicle and marine repair garages complying with the maximum allowable quantities of hazardous materials listed in Table 307.1(1) (see Section 406.8)  
 Photo engravings  
 Resilient flooring  
 Silks  
 Soaps  
 Sugar  
 Tires, bulk storage of  
 Tobacco, cigars, cigarettes and snuff  
 Upholstery and mattresses  
 Wax candles

**311.3 Low-hazard storage, Group S-2.** Storage Group S-2 occupancies include, among others, *buildings* used for the storage of noncombustible materials such as products on wood pallets or in paper cartons with or without single thickness divisions; or in paper wrappings. Such products are permitted to have a negligible amount of plastic *trim*, such as knobs, handles or film wrapping. Group S-2 storage uses shall include, but not be limited to, storage of the following:

Asbestos  
 Beverages up to and including 16-percent alcohol in metal, glass or ceramic containers  
 Cement in bags  
 Chalk and crayons  
Covered boat moorage not classified as Group U  
 Dairy products in nonwaxed coated paper containers  
 Dry cell batteries  
 Electrical coils  
 Electrical motors  
 Empty cans  
 Food products  
 Foods in noncombustible containers  
 Fresh fruits and vegetables in nonplastic trays or containers  
 Frozen foods  
 Glass  
 Glass bottles, empty or filled with noncombustible liquids  
 Gypsum board  
 Inert pigments  
 Ivory  
 Meats  
 Metal cabinets  
 Metal desks with plastic tops and *trim*  
 Metal parts  
 Metals  
 Mirrors  
 Oil-filled and other types of distribution transformers  
 Parking garages, open or enclosed  
 Porcelain and pottery  
 Stoves  
 Talc and soapstones  
 Washers and dryers

## SECTION 312 UTILITY AND MISCELLANEOUS GROUP U

**312.1 General.** *Buildings* and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

Agricultural buildings  
 Aircraft hangars, accessory to a one- or two-family residence (see Section 412.5)  
 Barns  
 Carports  
Covered boat moorage accessory to Group R-3 dwelling unit  
 Fences more than 6 feet (1829 mm) in height  
 Grain silos, accessory to a residential occupancy  
Greenhouses and other structures used for cultivation, protection or maintenance of plants  
 Livestock shelters  
 Private garages that comply with Section 406.3  
 Retaining walls  
 Sheds  
 Stables  
 Tanks  
 Towers